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| APPLICATION NO.    | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------|-------------|----------------------|---------------------|------------------|
| 10/722,203         | 11/25/2003  | Corey A. Salzer      | 27441.010           | 6809             |
| 36122              | 7590        | 11/04/2005           | EXAMINER            |                  |
| SETTER OLLILA, LLC |             |                      | KIM, PAUL D         |                  |
| 2060 BROADWAY      |             |                      | ART UNIT            |                  |
| SUITE 300          |             |                      | PAPER NUMBER        |                  |
| BOULDER, CO 80302  |             |                      | 3729                |                  |

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                               |                                  |  |
|------------------------------|-------------------------------|----------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/722,203 | Applicant(s)<br>SALZER, COREY A. |  |
|                              | Examiner<br>Paul D. Kim       | Art Unit<br>3729                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 13-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/25/03, 4/1/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This office action is a response to the restriction requirement filed on 8/39/2005.

#### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-12, in the reply filed on 8/29/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 13-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/29/2005.

#### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Higson (US PAT. 6,083,366).

Higson teaches a process of making a sensor comprising steps of: providing a substrate; printing conductive ink on the substrate to form a plurality of electrode regions (equivalent with a micro-electrode array); depositing an electrical insulation (insulating polymer) to cover one of the electrode regions (a planar electrode); sonically ablating the electrical insulation to form an array of pores through the electrical insulation to the conductive ink in the one electrode region; and depositing metal (conducting organic polymer) with into the pores to form an array of electrodes in the one electrode region (see also col. 1, line 49 to col. 2, line 32). The conducting organic polymer should have metal elements mixed with polymer.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Alternatively, Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higson in view of Uchida et al. (US PAT. 4,464,244) or Satou (JP 11163055 A).

If applicant still does not agree with the conductive organic polymer having metal elements mixed with polymer, which is not the same with a metal, then Uchida et al. teach a process of making a sensor including a process of filling holes (15) with a conductor in order to electrically connect inner electrodes with outer electrode as shown in Figs. 1 and 2 (see also col. 4, lines 1-7).

On the other hand, Satou teaches a process of making an electric component including a process of filling through-holes with a metal in order to electrically connect inner wiring (3) with outer electrode (4) as shown in Fig. 5 (see also abstract).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the conductive organic polymer of fabricating a sensor of Higson by a conductor as taught of Uchida et al. or by a metal as taught by Satou in order to electrically connect inner electrodes with outer electrode.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to apply the metallic material as recited in the claimed invention because Applicant has not disclosed that the metallic material as recited in the claimed invention provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either Uchida et al. or Satou because the metallic material as recited in the claimed invention would perform equally well such as electrically conductivity to connect between electrodes in Uchida et al. or Satou. Therefore, it would have been an obvious

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matter of design choice to modify the metallic material of Uchida et al. or Satou to obtain the invention as specified in claim 3.

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higson, modified by Uchida et al. or Satou, and further in view of Hall et al. (US PAT. 4,242,379).

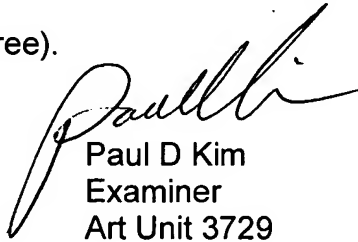
Higson, modified by Uchida et al. or Satou, teaches all of the limitations as set forth above except to treat the metal with thiol. Hall et al. teach an acid inhibitor including a process of treating a metal with thiols in order to prevent corrosion (see also col. 2, lines 55-61). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the metallic material of Higson, modified by Uchida et al. or Satou, by treating the metal with thiols in order to prevent corrosion.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Friday between 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim  
Examiner  
Art Unit 3729